

## NEUROSTIMULATION THERAPY MANIPULATION

### ABSTRACT

A user, such as a clinician or the patient, uses a control device to manipulate at least one neurostimulation parameter. A mapping system uses a calibrated map to map the directional output of the control device to values of at least one stimulation parameter to allow the user to intuitively control the value of the parameter. In some embodiments, where a stimulation device is used to deliver spinal cord stimulation (SCS) therapy for example, the user manipulates a parameter to effect the location and/or strength of paresthesia experienced by the patient. In exemplary embodiments, the parameter values are combinations of electrodes, and the mapping system selects electrode combinations based on the output of the control device such that a direction of movement of paresthesia experienced by the patient corresponds to a direction of manipulation of a directional controller of the control device. The mapping system may calibrate the map based on patient paresthesia information received from a user.